



Nez Perce-Clearwater National Forest Aviation Briefing Information 2018





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Introduction

Welcome to the Nez Perce-Clearwater National Forest. The intent of this packet is to provide information needed by Aviation personnel who are new to the Nez Perce-Clearwater National Forests. It was developed primarily for Airtanker, Helicopter, Air Attack, and Smokejumper personnel; however, it may be useful to pilots and crews of other types of aircraft.

Please contact the Zone Aviation Officer or Grangeville Interagency Dispatch Center (GVC) or others listed under key contacts, if you have any questions while you are here.

Leaders Intent

The goal of the Nez Perce-Clearwater National Forest, is to provide a multi-faceted aviation operation that strives for excellence with safety being the priority. Aviation Management will strive to meet the objectives of each mission, having considered the roles, responsibilities and policies that oversee the program as a whole. Each individual should be committed to making the work environment a safe place, while providing a work environment free from any and all hazards both in the air and on ground. We promote the idea if you see something that doesn't look right, "say something" and lets stop and fix. We will continue to strive in being a highly professional aviation program through our core values of duty, respect and integrity.

CLEARWATER/NEZPERCE NATIONAL FOREST FACILITIES AND AIRCRAFT

GRANGEVILLE

<u>Operations Office</u> – Located on the north side of the Air Center. The Zone Aviation Officer, Smokejumper Program Mgr., Smokejumper Supervisors and Air Attack operate there.

<u>Smokejumper Ready Room</u> – Located in the loft building of the Air Center. At full strength, one Twin Otter (**Jump-14**) and approximately 30 Smokejumpers can operate from Grangeville.

<u>Grangeville Helibase</u> – A Type III helicopter and its exclusive use crew operate out of the helibase building located behind the Air Center. Helicopter **H-1JB** EU contract on 6/14-9/21. Five landing pads are available. Pads 1 & 2 are for Light Helicopters and Pads 4, 5, 6 will be used for Heavy and Medium Helicopters. Grangeville also hosts a Type 1 Helicopter CH-47 from Billings Flying Service **N401AJ** on contract from 6/11-10/8

<u>Air Tanker Base</u> – Located behind the Air Center building. The Idaho Department of Lands has two AT 802 SEATs (Single Engine Air tankers) stationed in Grangeville. There are 2 loading pits. The retardant base uses a ramp frequency of 124.125 for communication with the SEATs and all aircraft entering the FS ramp. Seats **T-822** and **T-835** Contract dates are 7/5-9/12.

<u>Light Fixed Wing Contract</u> – The Forest contracts two Cessna aircraft annually for Aerial Observation, transportation of personnel into back country airstrips, and other FS recon needs. A Cessna 206 contract dates 6/12-9/24 and a Cessna 182 contract dates 7/2-9/8

<u>Air Attack Platform-</u> Hosts a AC690 Turbine Aero-commander with qualified Air Attack Group Supervisor. Tail # **7GB** contract dates 5/1-9/22

<u>Supervisor's Office</u> is located at 104 Airport Road, on the north side of Grangeville which is across the street from the Grangeville Air Center.

<u>Grangeville Interagency Dispatch (GVC)</u> is located in the Supervisor's Office at 104 Airport Road on the northwest side of the building. All aircraft flights are ordered and scheduled through the Dispatch office.

Forest Warehouse is located south of the Supervisor's Office

Musselshell Work Center

A Type III helicopter and exclusive use crew is assigned **H-74H** 6/20-9/27. Two grass pads and a windsock are located across the road from the work center. Lodging may be arranged through the local FMO. No other food or lodging is available on site.

Title	Name	Phone	Email
Title	Name	Thone	Linan
Zone Aviation Officer	Willy Acton	Cell 208-507-0942	wacton@fs.fed.us
		Office 938-0942	
Smokejumper Unit Manager	Chris Young	208-983-9570 office	ccyoung@fs.fed.us
Smokejumper Operations	Mike Blinn	208-983-9584 office	michaelblinn@fs.fed.us
Air Attack	Shawn Walters	208-983-9583	swalters@fs.fed.us
Tanker Base Manager	Donny Vankomen	208-983-1964	dvankomen@fs.fed.us
		208-983-9577 office	Cell 505-860-2529
Grangeville Helitack	Jeremy Beeson	208-451-6710 cell	jbeeson@fs.fed.us
Musselshell Helitack	Doug Colaprete	208-926-6430	dcolaprete@fs.fed.us
	Musselshell work center	208-435-9326	Cell 208-816-8862
Type 1 Helicopter Mgr.	Ben Thayer	208-830-1636	benjaminlthayer@fs.fed.us
24 Hour Dispatch		208-983-6800	
24 Hour Dispatch		208-383-0800	
Grangeville Dispatch Mgr.	Mark DeCaria	208-983-6801	madecaria@fs.fed.us
Assistant Dispatch Mgr.	Rebecca Ward	208-983-6802	rward@fs.fed.us
IDL Assistant Mgr	Holley Arnzen	208-983-6810	
Aviation Dispatch	Jennifer Enneking	208-983-6803	jenniferenneking@fs.fed.us
Intelligence Dispatcher	Jenny Taylor	208-983-6816	jennifertaylor@fs.fed.us
Logistics			
Initial Attack Dispatcher	Adam Warren	208-983-6817	adamwarren@fs.fed.us
South Zone	Jacon Obsinger	200 002 6045	iohringer@fc fed
Initial Attack Dispatcher West Zone	Jason Obringer LeAnn Nelson	208-983-6815	jobringer@fs.fed.us
Initial Attack Dispetcher	Jennifer Vafiades	208-983-6814	jvafiades@fs.fed.us
Initial Attack Dispatcher North Zone	Jennier Vallaues	208-983-6813	Jvanaues@is.ieu.us
Forest Warehouse	Archi Tirado	208-983-5155	archibardotirado@fs.fed.us
Idaho County Airport	Mike Cook	208-507-0262	

Grangeville Smoke Jumper Operations

The smokejumper missions are primarily initial attack, while most effective at providing rapid initial response, smokejumpers are well equipped to respond to extended attack incidents and short term critical need missions on large fires

Aircraft: Twin Otter J-14 On Contract 4/3/18-9/6/18

The Twin Otter is an ideal aircraft for back country operations because of its **STOL** (short takeoff and landing) capabilities.

It can be used for crew shuttling as well as cargo hauling with a pay load of 3300lbs.

Range: 300 miles

Payload: 8 Jumpers with cargo, each planeload may have an ICT3. All jumpers have basic 1st aid training and EMTs are available on most loads as well as WFRS. (ALL JUMPERS ARE SELF SUFFICIENT FOR THREE DAYS)

Para-Cargo

If it can fit out the door chances are we can deliver it via para cargo....

Some usual items ordered are:

- Saws
- Pumps/structure protection kits
 - Medical equipment (trauma kits, Oxygen, etc...)
 - Communication equipment (satellite phone)
 - Fresh food order: meats, milks, eggs, juices, etc... We can package fresh food in coolers with dry ice and have them delivered to an incident. ***To order fresh food contact dispatch at least 24hrs before the food is needed and give them the number of people and a lat/long of the incident and or cargo spot /drop zone.***

Drop zone safety selection guidelines should include:

- 200 feet on each side of the flight path of the aircraft, clear of obstacles and personnel
- 300 feet in the direction of the approach of the jump plane
- 1300 feet clear of obstacles in the direction of departure.
- The drop zone will be at least 600 feet from all populated areas.

Large incident drop zones should be marked with a white or orange "T" at least seven feet long. It should be placed so that, as the plane is flying into the wind, it can be easily read.

Air Tanker Information SEATS

Grangeville (GIC)

2 Seats: Air Tractors 802F

T822, T835

- Speed 221 kts.
- 799 gallons +,- (based on performance planning)
- Can order water, foam, or retardant

McCall (MYL)

• 1 AT 802F

Coeur D'Alene (COE)

• 1 AT 802F

• 1 Fire Boss (Scooper)

Grangeville Jettison Site

<u>Jettison sites: (2)</u> side by side open hilltop meadows <u>10 nm</u> S. of Grangeville on IDL State protected land

45 51.385, 116 10.680 ELEVATION: +/- 5300

45 51.388, 116 10.697



ROLE OF THE GRANGEVILLE INTERAGENCY DISPATCH OFFICE

The primary mission of the Dispatch Center is to maintain prompt and accurate communications and coordination of all incidents of the Forest. This is accomplished by continually monitoring current and forecasted conditions on the Forest and working with cooperators to implement necessary action.

The ultimate goal of the Dispatch Office is efficient utilization of aircraft with safety being the highest priority. The dispatch staff coordinates all aircraft use on the Clearwater/Nez Perce National Forests. The Dispatch Center also provides aircraft support with adjoining forests and neighboring regions. All decisions regarding air tankers, lead planes and helicopters are coordinated with the Forest's fire staff and/or the Geographical Coordination Center. Dispatchers work closely with the Northern Rockies Coordination Center in national resource aircraft ordering and dispatching.

FLIGHT FOLLOWING PROCEDURES

Automated Flight Following (AFF) is the preferred method of agency Flight following. If the aircraft and flight following office have AFF capability, it shall be utilized. Periodic radio transmissions are acceptable when utilizing AFF.

AFF requirements and procedures can be found in section 24.3.1 of the Northern Rockies Mobilization Guide.

Aircraft departing from Grangeville will contact GVC via radio on the flight following frequency stating they are airborne and giving "persons on board", fuel on board, ETE and their destination. The GVC dispatcher will verify that the aircraft icon is visible on the AFF screen and will respond that the aircraft will be flight followed using AFF. Aircraft will maintain contact with GVC on the appropriate zone frequency (north, west, or east zone) at all times.

If there is a problem with AFF at any time during the flight, 15-minute radio check-in procedures will be resumed until the problem is resolved.

At any time, if radio contact cannot be established the pilot will abort the mission and return to the airport/helibase.

Position reports will be reported in Lat/Long, geographic location (if known), and heading. Lat/Longs will be reported in degrees, minutes and tenths (decimal minutes). (DDD.MM.M) ie. 48 36.12'N/114 08.12'W.

Overdue Aircraft – In the event of an overdue check in, dispatch will try to contact the aircraft in question. If after 30 minutes no contact has been made Grangeville Dispatch will initiate the Interagency Aviation Mishap Response Guide and Checklist. Search aircraft will be launched to the last reported position. In the event an aircraft will be shut down at a remote location for an extended period, check-in procedures will be outlined by Dispatch prior to ending radio contact.

*ADDITIONAL INFORMAION CAN BE FOUND AT https://gacc.nifc.gov/nrcc/dc/idgvc/index.htm

GPS USE

The Dispatch Center has the capability of converting latitude/longitude to a township/range/section, or vice/versa. This program will also give heading and nautical miles from VOR, Tanker Bases and Helibases. It will also tell us if we are entering into a Military Training Route (MTR). If you have GPS capability in your aircraft, Dispatch will be able to give you the coordinates for location as well as bearing and distance off the Grangeville VOR. For calibration purposes, the exact latitude and longitude at the Airport Reference Point (APR), is the center of the runway.

Datum: WGS 84

GRANGEVILLE INTERAGENCY DISPATCH CENTER

Mark DeCaria, Center Manager 104 Airport Road Grangeville, Idaho 83530

TEL: (208) 983-6800 FAX: (208) 983-4065

idgvc@fs.fed.us

	PRI	MARY			
	RECEIVE	TRANSMIT	MODE		
National Flight Following	168.650/110.9	168.650/110.9	Narrow		
Tanker Base	124.125	124.125			
Grangeville Air to Air IA (ID07)	132.025	132.025			
Clear/Nez Air to Ground 1 (ID07) A/G 17	167.9875	167.9875	Narrow		
Clear/Nez Air to Ground 2 (ID07) A/G 45	167.6500	167.6500	Narrow		
IDL Air to Ground (ID07) A/G 03	151.1450	151.1450	Narrow		
Air Guard	168.625	168.625/110.9	Narrow		
Fire Aviation Network (FAN) High Camp *	173.1625/146.2	166.0000/114.8	Narrow		
Fire Aviation Network (FAN) Hemlock *	173.1625/146.2	166.0000/151.4	Narrow		
Fire Aviation Network (FAN) Iron Mtn.*	173.1625/146.2	166.0000/162.2	Narrow		
*Functioning - usage in testing for local flight following					

U.S. FOREST SERVICE

NEZ PERCE - CLEARWATER NATIONAL FORESTS

	PRIM	IARY	REPEATER	
	RECEIVE	TRANSMIT	TRANSMIT	
	FREQ/TONE	FREQ/TONE	FREQ/TONE	MODE
North Fork / Palouse District				
North 1: Gold Hill	170.500		165.0125/156.7	Narrow
North 2: Junction Mountain	170.500		165.0125/136.5	Narrow
North 3: Eagle Point	170.500		165.0125/162.2	Narrow
North 4: Elk Butte	170.500		165.0125/141.3	Narrow
North 5: Osier Ridge	170.500		165.0125/100.0	Narrow
North 6: Hemlock Butte	170.500		165.0125/151.4	Narrow
Powell District				Narrow
East 1: Beaver Ridge	171.5750		166.2625/100.0	Narrow
East 2: Diablo Mountain	171.5750		166.2625/151.4	Narrow
East 3: Bear Mountain	171.5750		166.2625/156.7	Narrow
East 4: Rocky Point	171.5750		166.2625/162.2	Narrow
Lochsa District				Narrow
South 1: Hemlock Butte	172.2250		165.7000/100.0	Narrow
South 2: Coolwater Mtn.	172.2250		165.7000/151.4	Narrow
South 3: Castle Butte	172.2250		165.7000/156.7	Narrow
South 4 Doty Ridge	172.2250		165.7000/162.2	Narrow
Salmon River District:				
Nez West 1: Slate Point	170.5625		164.1375/107.2	Narrow
Nez West 2: High Camp	170.5625		164.1375/114.8	Narrow
Nez West 3: Black Butte	170.5625		164.1375/162.2	Narrow
Nez West 4: Heavens Gate	170.5625		164.1375/146.2	Narrow
Nez West 5: Cold Springs	170.5625		164.1375/141.3	Narrow
Nez West 6: Pilot Knob	170.5625		164.1375/156.7	Narrow
Red River/Moose Creek District:				
Nez East 1: Iron Mtn.	173.1375		166.2000/162.2	Narrow
Nez East 2: Anderson Butte	173.1375		166.2000/107.2	Narrow
Nez East 3: Burnt Knob	173.1375		166.2000/114.8	Narrow
Nez East 4: Oregon Butte	173.1375		166.2000/127.3	Narrow
Nez East 5: Fog Mtn.	173.1375		166.2000/146.2	Narrow
Nez East 6: Shissler	173.1375		166.2000/156.7	Narrow
Nez East 7: Gardiner	173.1375		166.2000/141.3	Narrow
Nez East 8: Coolwater East	173.1375		166.2000/167.9	Narrow

GRANGEVILLE INTERAGENCY DISPATCH CENTER

(cont)

IDAHO DEPARTMENT OF LANDS

(Check for changes in removal of tone on one side)

(and an				
	PRIMARY		REPEATER	
	RECEIVE TRANSMIT		TRANSMIT]
	FREQ / TONE	FREQ / TONE	FREQ / TONE	MODE
IDL Air – Ground A/G 03	151.1450	151.1450		Narrow
IDL Direct 2	159.2850/77.0	159.2850/77.0		Narrow
IDL Direct 1A	159.2550/114.8	159.2550/114.8		Narrow
Project Fire	159.2850/100.0		151.4450/100.0	Narrow

CRAIG MOUNTAIN FIRE PROTECTIVE DISTRICT

	PRIMARY		REPEATER	
	RECEIVE TRANSMIT		TRANSMIT	
	FREQ / TONE FREQ / TONE		FREQ / TONE	MODE
Cottonwood Butte	159.4650/136.5		151.2650/127.3	Narrow
Jim Creek	159.2325/131.8		151.3325/123.0	Narrow

MAGGIE CREEK FIRE PROTECTIVE DISTRICT

	PRIMARY		REPEATER	
	RECEIVE TRANSMIT		TRANSMIT	
	FREQ / TONE	FREQ / TONE	FREQ / TONE	MODE
Woodrat Mountain	159.4500/136.5		151.3100/100.0	Narrow
Teaken	159.3000/123.0		151.3250/100.0	Narrow

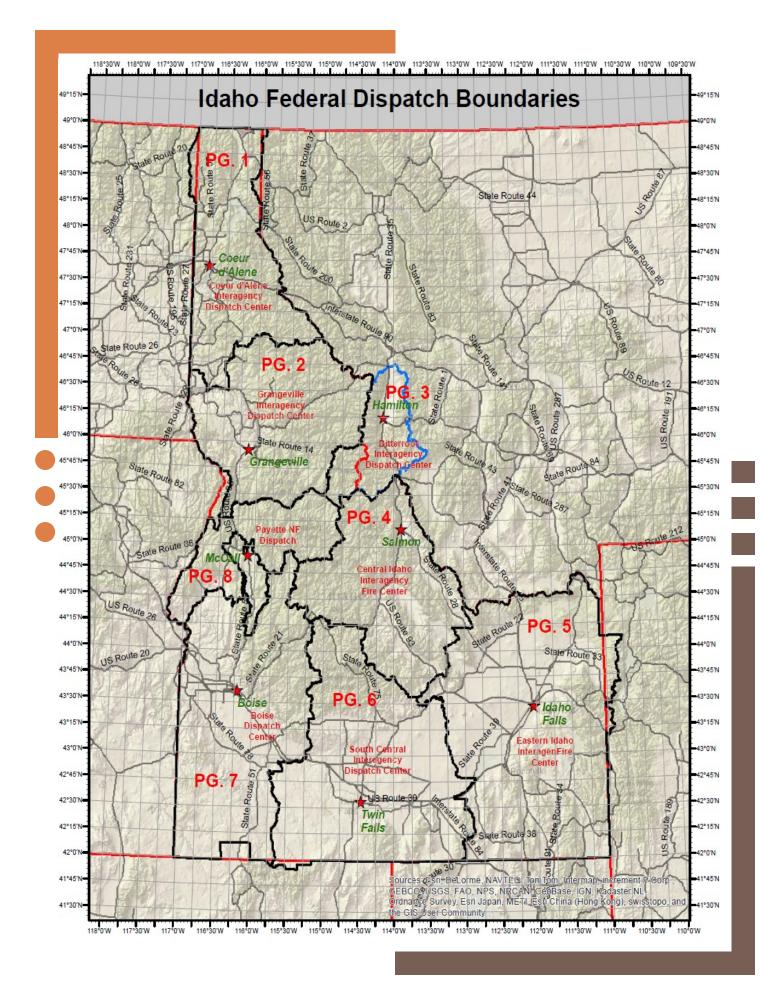
NEZ PERCE TRIBE

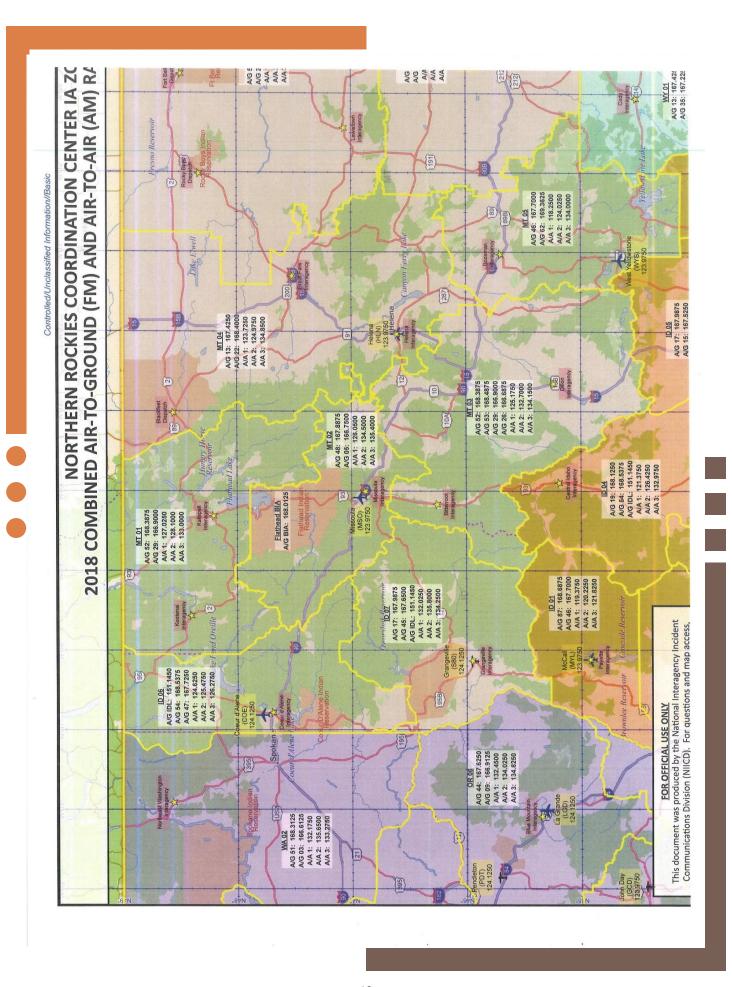
_	PRII	MARY	REPEATER	
	RECEIVE TRANSMIT		TRANSMIT	
	FREQ / TONE FREQ / digital TONE		FREQ / TONE	MODE
Teaken	154.1375	159.1575/D754*		Narrow
Sundown	154.2725	151.4675/D371*		Narrow

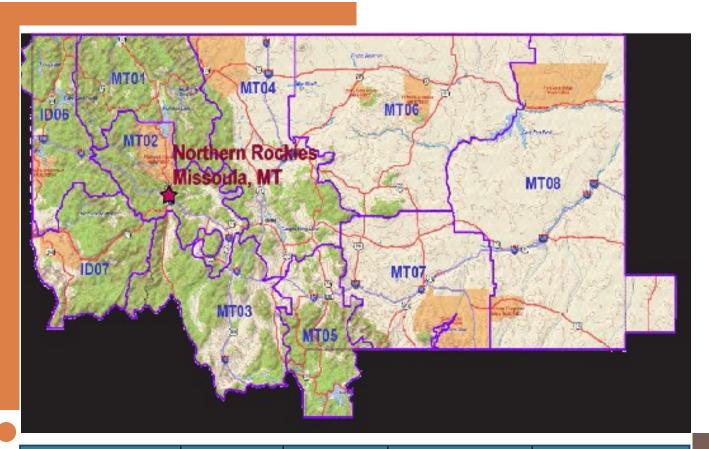
*note: DCS tone

CLEARWATER POTLATCH TIMBER PROTECTIVE ASSOC'N (CPTPA)

	PRIM	IARY	REPEATER	
	RECEIVE	TRANSMIT	TRANSMIT	
	FREQ / TONE	FREQ / TONE	FREQ / TONE	MODE
CT Direct #1	159.2700	159.2700		Narrow
CT Repeater #1 (Elk Butte)	159.2700		151.2050 / 97.4	Narrow
CT Direct #2	153.0650	153.0650		Narrow
CT Repeater #2 (CPTPA 2)	153.0650		158.1600/ 97.4	Narrow
CT Direct #3	153.3200	153.3200		Narrow
CT Repeater #3	153.3200		158.2950/192.8	Narrow



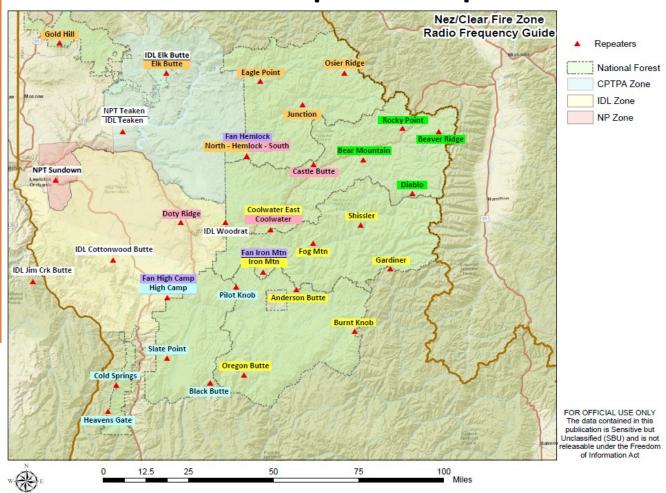




Desci	ription	Mobile RX	Mobile TX	Tone	Lat/Long
Flight Fol	lowing	168.6500	168.6500	RX/TX 110.9	N45 51.70/W116 7.30 (Highcamp)
Air G	uard	168.6250	168.6250	TX 110.9	N45 51.70/W116 7.30 (Highcamp)
	peaters rests (Fire	173.1625 RX CG- 146.2	166.0000	TX 114.8 (Highcamp)	N45 51.70/W116 7.30 (Highcamp) N46 28.4/W115 37.8
	on Net)	KX CG- 146.2		TX 151.4 (Hemlock)	(Hemlock) N45 58.1/W115 32.5 (Iron Mountain)
				TX 162.2 (Iron Mnt)	
Repe (NezW		170.5625	164.1375	TX 114.8	N45 51.70/W116 7.30 (High Camp)
Repe (CWF		171.5750	166.2625	TX 100.0	N46 33.8/W114 26.4 (Beaver Ridge)
Repe (CWF N		170.5000	165.0125	TX 136.5	N46 41.7/W115 16.7 (Junction)
Repe (Nez V		170.5625	164.1375	TX 146.2	N45 22.1/W116 29.6 (Heaven's Gate)
Repe (Nez E		173.1375	166.2000	TX 156.7	N46 09.9/W114 56.3 (Shissler)

Note: GVC has limited Flight Following coverage in the extreme East and North of the zone. All Highcamp locations have similar coverage and are located on the high point above Grangeville to the south at about 6100 feet and linked via UHF links to the dispatch center at the airport. If unable to contact dis patch on National Flight Following please try on one of the repeaters listed.

Forest Repeater Map

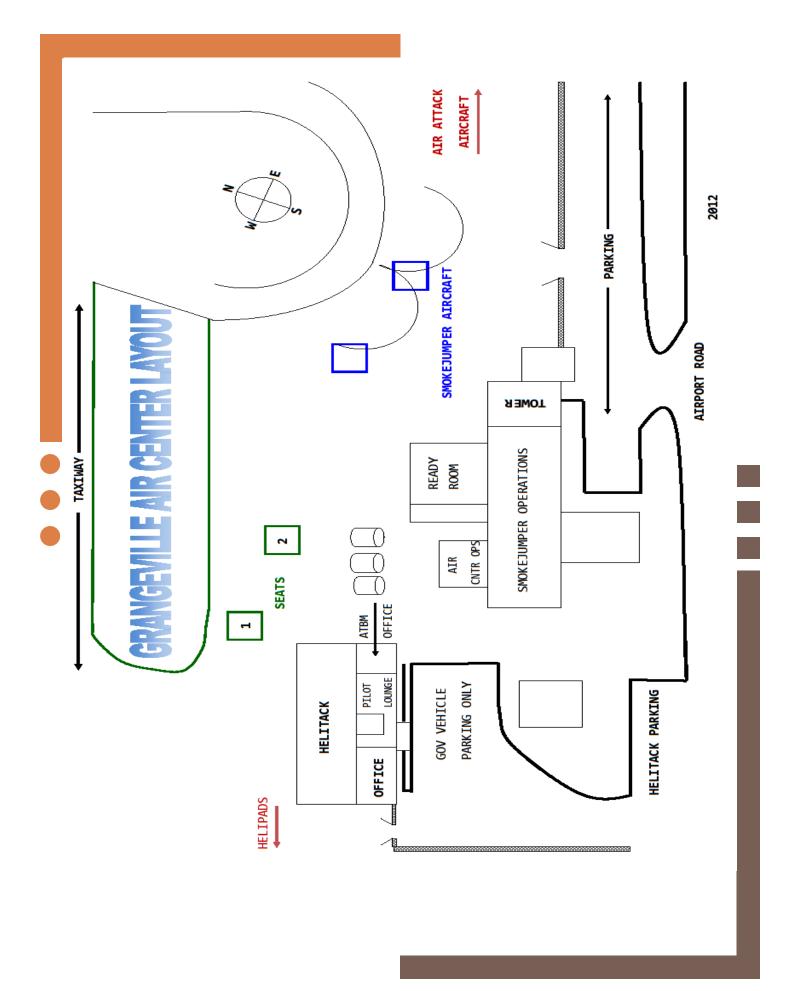


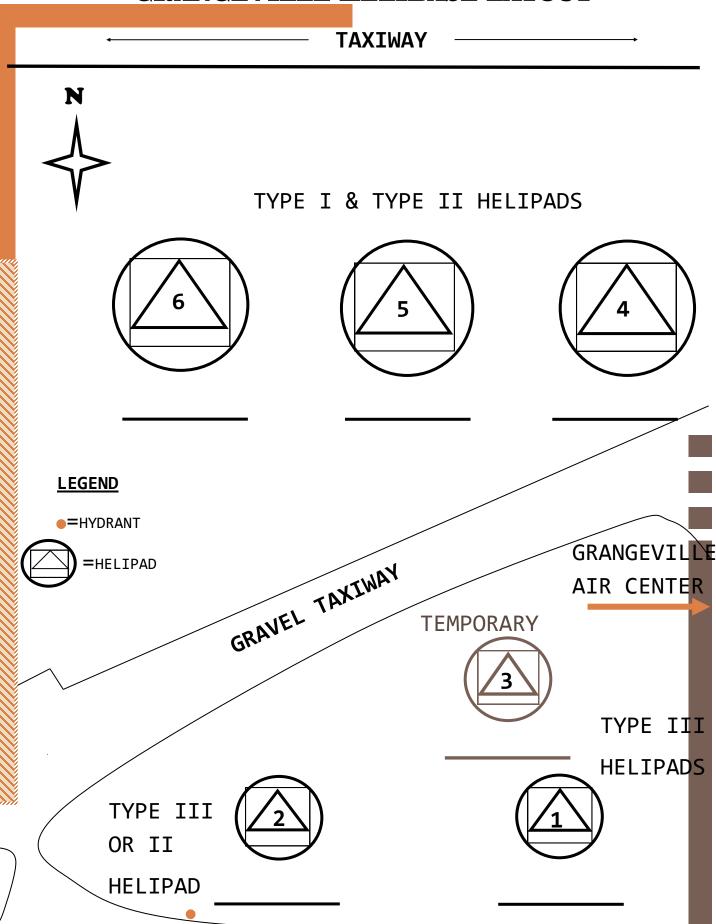
Lookout Locations

Name	ELE	Lat	Long	Notes
Oregon Butte Lookout	8465	45 31.4	115 39.9	Type III, OGE
Sheep Hill Lookout	8405	45 35.4	115 04.9	Wilderness
Green Mnt. Lookout	7227	45 46.3	115 04.5	Type III, Road
Gardiner Lookout	6597	45 58.1	114 45.3	Type III, Wilderness
Shissler Lookout	5375	46 10.3	114 56.5	Type III, Wilderness
Coolwater Lookout	6929	46 09.4	115 27.8	Type III
Indian Hill Lookout	6816	45 59.8	115 14.1	Type III
Walde Lookout	5221	46 14.74	115 38.07	Type III
Wietas Butte Lookout	5967	46 33.8	115 26.4	Type III
Chair Point	6951	46 28.8	116. 13.1	
Coral Hill	5985	45 58.1	115 49.1	
Pilot Knob	7135	45 54.6	115 42.8	
Black Mtn Lookout	7077	46 52.73	115 33.12	Type III, OGE
Osier Ridge Lookout	6115	46 49.7	115 00.9	Type III
Diablo Lookout	7461	46 17.8	114 37.0	Type III, Wilderness

Local Fire Size Up

Fire Name:				
	Date:	_Time:	C:	_Repeater:
Township:	_Range:	Section:	¼ ¼ Section:	
Lat:	Long	<u>.</u>		
Size (Acres):	Elevation	:	_Aspect:	
Spread Rate:	fast	moderate slo	ow	
Slope Position (by 1	L /3) : upper	middle lower		
Slope %: 0 5	10 15 20	25 30 35 40	45 50	
Fuel: duff grass sh	rub slash ppine	dfir Ippine spruc	e sbalpn other	
Fuel Loading: light	moderate	heavy		
Wind Direction:	Wind	d Speed:		
Smoke Color: blue	white gray br	own black		
Smoke Volume: lig	ght moderate	heavy		
Fire Behavior: smol	dering creeping	running run/spo	ot torching cro	wning torch/spot
Flame Length: 0-2	2 2-4 4-6 6-	8 8-10 10-12		
Cause: lightning h	uman other:			
Hazards: snags	nelicopters stru	ctures etc.		
Spread Potential:	none low mo	derate high e	ktreme	
Do you have any ch	eck marks on the	complexity analy	sis? Yes No	
Special Needs (Add	itional Resources	, Spot Weather, et	c) :	





AIRPORT ROAD

GRANGEVILLE AIRPORT PATTERN

All fixed-wing aircraft are expected to fly the standard left hand pattern at Grangeville, announcing downwind, base and final on Unicom Frequency 122.8. Rotor-wing aircraft should cross the airfield at the middle of the runway, announcing intentions on 122.8 and make a straight in approach to their destination. This is important from a safety standpoint. Any Forest Service aircraft that cuts someone out of the pattern or is discourteous in any way causes us a serious public relations problem as well. Please be sensitive to this.

BACK COUNTRY AIRSTRIPS



Be aware, we have special requirements for missions into our backcountry strips that include currency on that strip in addition to other requirements. The Zone Aviation Officer or the Dispatch Office can fill you in on specific requirements (they are listed in the Forest Aviation Management and Safety Plan. Most backcountry landings will be scheduled for early morning or late afternoons. This is based on lower temperatures and lighter winds during that part of the day. Be alert for other traffic and announce your intentions on 122.9 when flying near back country strips.

OTHER FLIGHT HAZARDS

- Microwave and radio towers
- Power lines (active or inactive across many local rivers) Conduct High Level recons!!!
- ♦ Lookout towers, Large Birds, Unmanned aerial systems, High winds, snags, mountainous terrain and other GA aircraft.

RETARDANT USE NEAR WATERWAYS

- Waterway defined: "Any body of water including lakes, rivers and ponds whether or not they contain aquatic life."
- Avoid aerial application of wild land fire chemicals within 300 feet of waterways. If Occurrence happens, report to dispatch and fill out form NIFC 9210-18 for documentation purposes.
- Notify GAC Dispatch as soon as practical 208-983-6800

R-1 QR Forest Maps

Beaverhead Deerlodge Central East 2013



Beaverhead Deerlodge Central West 2013



Beaverhead Deerlodge North East 2015



Beverhead Deerlodge South East 2015



Beaverhead Deerlodge South West 2015



Bitterroot Darby 2015



Bitterroot Stevensville 2015



Bitterroot West Fork 2015



Bitterroot Sula 2015



Bob Marshall North 2012



Bob Marshall South 2012



Clearwater East 2015



Clearwater West 2015



CDA 2013



Custer Ashland North 2016



Custer Ashland South 2016



Custer Beartooth East 2009



Custer Beartooth West 2006



Custer Sioux East 2009



Custer Sioux West 2009



Flathead North 2015



R-1 QR Forest Maps

Flathead South 2015



Gallatin Central East 2013



Gallatin Central West 2013



Gallatin North East 2013



Gallatin West North 2013



Helena East 2006



Helena West 2006



Kaniksu 2011 This QR is disabled



Kaniksu 2011 This QR is disabled

Kootenai North DRAFT 2017



Kootenai South DRAFT 2017



LC Jefferson East 2017



LC Jefferson West 2017



LC Rocky Mountain North DRAFT



LC Rocky Mtn South DRAFT



Little Missouri North 2010



Little Missouri South 2010



Lolo Missoula North 2014



Lolo Missoula South 2014



R-1 QR Forest Maps

Lolo Ninemile North 2014



Lolo Ninemile South 2014



Lolo Plains North 2014



Lolo Plains South 2014



Lolo Seeley Lake East 2014



Lolo Seeley Lake West 2014



Lolo Superior East 2014



Lolo Superior West 2014



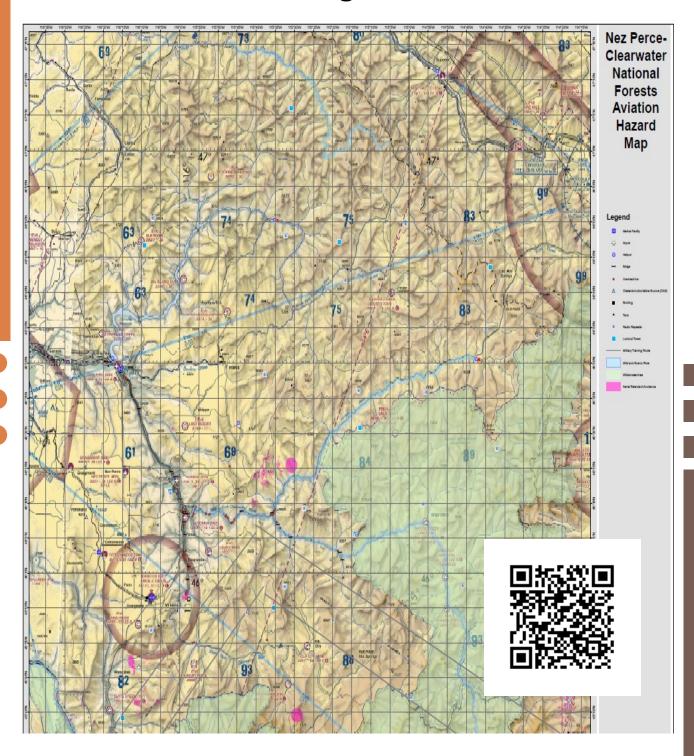
Sheyenne National Grassland 2016

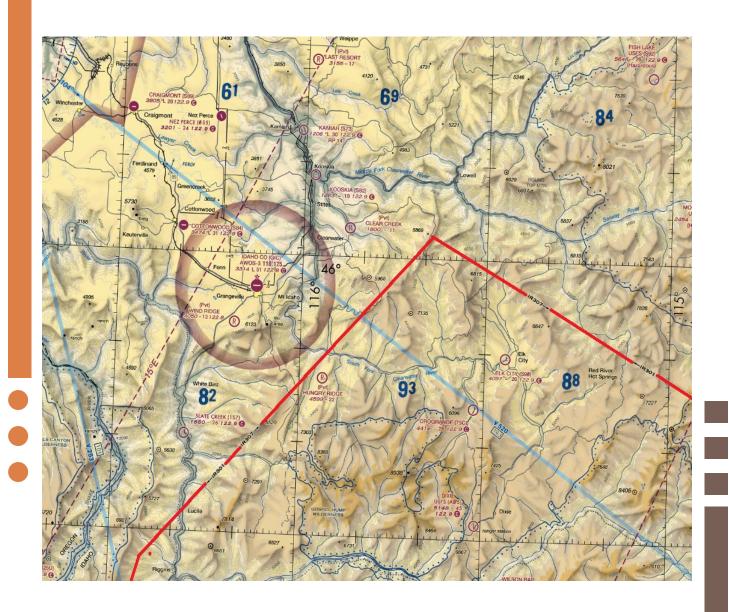


St Joe 2015



Known Aerial Flight Hazards 2018





Military Training Route

IR301-IR307

Contact Grangeville Dispatch to De-Conflict.

HELIBASES ON THE CLEARWATER/NEZ PERCE

<u>Dixie Guard Station</u> – The Dixie FS Airstrip is available for establishing multiple helipads in times of extended fire operations. There is a 500 gallon Jet A tank on site. Minimal food and lodging on site. N45.31.40 x W115 31.30 ELV.5148



Powell

Ranger Station has a 500 gallon Jet A Fuel Trailer on site. Two Type III landing pads with windsocks are at the Ranger Station. There are 2 landing pads for Type II helicopters at White Sands Helibase, two miles east of the Ranger Station. Food and lodging are available at Powell and Lolo Hot Springs in Montana. N46 30.55 x W114 42.53. ELV 3410



<u>Musselshell Work Center</u> – A Type III helicopter and exclusive use crew is assigned. Two grass pads and a windsock are located across the road from the work center. Lodging may be arranged through the local FMO. No other food or lodging is available on site. N46 21.43 x W115 44.56. ELVATION 3185



<u>Canyon Work Center</u> has a 500 gallon Jet A Trailer on site. One Type III elevated landing pad with windsock. Lodging may be arranged through the local FMO. No other food or lodging is available on site. N46 50.20 x W115 35.21 ELVATION 1725



York Helispot. Located across street from Elk City Ranger Station in Elk City, ID. 2 gravel pads are present. Some lodging available. No Fuel. ELE. 4010. N45.49.83 x W115.26.07



Nez Perce/Clearwater Fire Management Zone Helicopter Fueling Site Procedures and Maintenance

USFS Government owned fueling sites on the Zone enhance operational flexibility and can assist in limiting fuel service vehicle movements over vast geographic areas. The intent of the remote fuel sites is to help ensure that Jet-A is available to support fire/resource management activities, as well as search and rescue support. The tanks reduce flight exposure and increase operational effectiveness by keeping aircraft tactically engaged rather than flying extended distances for fuel. They also allow aircraft to keep engaged while their fuel service vehicles are en-route or preclude the need for fuels service vehicles to be dispatched. Management of these sites requires strict adherence to quality control procedures to ensure clean fuel. At the identified sites, each Helitack Crew will be responsible to:

- Provide annual and periodic maintenance and oversight of each Jet-A storage facility on the Forest. Use Form HCM-3 Aircraft Fuel Facility Inspection Log for ongoing inspections. Perform a complete inspection at least monthly or at the time the facility is next utilized, whichever is sooner.
- Ensure each facility has a sufficient amount of fuel at all times. Tanks should be kept at least ¾ to full and all times.
- Keep Grangeville Dispatch advised when tanks will need to be filled.
- Brief contractors about Government fuel. When used, the contractor will be charged at the national average rate (as per the current Flight Rate Chart) and they can expect that their fuel trucks will be utilized to refill the tanks throughout the season as needed. Contractors will be paid for Fuel Service Vehicle mileage.
- Inform the Forest Aviation Officer of any needs, problems, or concerns with the facilities.
- Charges and payments will be recorded <u>daily</u> on the pay documents.
- Fuel in tanks that has not been used for two full seasons will be considered for removal. Decision
 will be based upon number of gallons used/replaced, visual and biological testing and aviation
 industry Best Practices.

Helitack Supervisor or assistant will be responsible to open and close their assigned fueling sites and ensure completion of the attached checklist. Upon opening/closing, ensure that the FAO, ATGS, Grangeville Dispatch and both Helitack Bases are notified:

Dixie: Lat 45 31.40 Long 115 31.30 Grangeville Helitack

Powell: Lat 46 30.53 Long 114 42.53 Musselshell Helitack

Canyon: Lat 46 50.20 Long 115 35.21 Musselshell Helitack

During use, the aircraft pilot is responsible for the actual fueling or the aircraft. The manager must ensure that <u>all</u> use is properly documented in the Log Book, and addressed on the payment document and in the Aircraft Contract Daily Diary.

GRANGEVILLE AIR CENTER & IDAHO COUNTY AIRPORT FUEL FLOW SOP'S

- GRANGEVILLE AIR CENTER HAS AN AGREEMENT (SEE ATTACHED PERMIT) TO ALLOW THE USE OF
 CONTRACTED VENDORS TO USE THEIR OWN FUEL TRUCKS WHILE AT IDAHO COUNTY AIRPORT. IT
 WILL REQUIRE EACH HELICOPTER MANAGER/VENDOR TO KEEP TRACK OF ITS OWN USE, AND SUBMIT UPON LEAVING GRANGEVILLE AIR CENTER. THERE WILL BE NO ADDITIONAL CHARGES TO THE
 VENDORS, GOVERNMENT WILL PROCESS ALL CHARGES AT END OF FISCAL YEAR.
- Helicopter Mangers should note this information in Daily Diary, for information purposes.
- TRACK USE WITH ACCOUNT CODE AND NUMBER OF GALLONS PUMPED ONTO THE FLOWAGE USE FORM AND SUBMIT THE FORM TO THE ADMINISTRATIVE CLERK LOCATED IN THE SMOKE JUMPER'S BUILDING.
- JEREMY BEESON HELICOPTER SUPERVISOR. WILL BE THE FINAL COLLECTION POINT FOR TALLYING INFORMATION BEFORE SUBMISSION TO CONTRACTING SPECIALIST FOR REMIT OF TOTAL CHARGES.
- ANY QUESTIONS PLEASE CONTACT ANY SUPERVISOR ON THE CONTACT LIST:

Contacts

Name	Role	Phone #	Email
Wily Acton	Forest Aviation Officer	208-507-0942	wacton@fs.fed.us
Thomas Clay	Assistant Heli. Sup. Type 1 (Detail)	208-630-4475	tjclay@fs.fed.us
Jeremy Beeson	Helicopter Supervisor Type 3	208-507-1649	jbeeson@fs.fed.us
Karen Ruklic	Contracting Specialist	208-983-5144	kruklic@fs.fed.us
	GAC Office Clerk	208-983-1964	
Shawn Walters	Air Attack	208-983-5666	swalters@fs.fed.us

GRANGEVILLE AIRPORT FUEL FLOWAGE

DATE	P-CODE	TAIL#	GAL- LONS	DATE	P-CODE	TAIL#	GAL- LONS
example							
01/01/15	P12345	9PJ	300				

Helispots/Airstrips

(Name):	(Elev.):	(Lat.):	(Long.):	(Notes:)
Salmon River District (D-	<u>1):</u>			
Slate Creek Airstrip 1S7	1660	45 40.7	116 17.9	Wires, windsock
Island Bar	1750	45 25.3	116 16.8	Type I,IGE, public
Shorts Bar public beach	1781	45 24.85	116 18.00	Type I,IGE, public
Seed Orchard Helibase	1800	45 34.56	116 18.04	Wires, windsock, pad
Florence Helibase	6240	45 31.35	115 59.97	Multiple pads
White Bird Ridge	5108	45 18.81	116 24.18	IGE, Type II,4WD Rd.
Rapid River Fish Hatch.	2150	45 21.3	116 23.4	Wires,permission,TypeIII
Clearwater District (D-4)	<u>:</u>			
McComas Meadows	3200	45 53.4	115 55.4	Near Bridge
W. Fork Clear Crk. Pit	3250	46 01.6	115 49.5	Type II, OGE
Lightning Creek Landing	3480	45 55.0	115 56.3	Туре І
Mill Creek-Meadow	4600	45 42.4	116 01.8	OGE
Ralph Smith Place	3600	45 50.1	115 52.3	Type I,IGE
Red River/Elk City Distric	ct (D-5/8):			
Mullins Airstrip BCS	4299	45 43.3	115 22.2	Windsock
Dixie F.S. Airstrp. A05	5148	45 31.4	115 31.3	Windsocks, JET A
Concord Airstrip	7655	45 35.4	115 40.8	Private property
Mackay Bar Airstrip	2172	45 22.7	115 30.1	Private, Fees
Elk Lake	6640	45 50.56	115 04.79	Type III,S. edge of lake
Magruder R.S.	4000	45 42.2	114 42.6	Type II
Sheep Ranch Airstrip	2100	45 26.3	115 39.9	Private
Elk City Airstrip S90	4097	45 49.4	115 26.3	Windsock
Pilot Knob Lookout	7135	45 54.6	115 42.8	

(Name):	(Elev.):	(Lat.):	(Long.):	(Notes:)
Moose Creek/Selway Dist	trict (D-6):			
Moose Creek Airstrp 1U1	2454	46 07.7	114 55.3	Windsock
Shearer Airstrip 2U5	2634	45 59.8	114 50.3	Windsock
Cedar Flats	1522	46 05.7	115 32.2	Windsock, Type II
Racetrack	1780	46 02.4	115 17.8	Type I, Narrow Rd.
Johnson Bar	1500	46 06.23	115 33.52	Type I, Campground
Moose Crk.Ranch Airstrp	2300	46 10.53	114.53.24	Wilderness
Pierce/Lochsa Districts ([D-1/D-5):			
Kamiah Airstrip S73	1194	46 13.16	116 00.81	Windsock
Kooskia Airstrip S82	1265	46 08.0	115 58.9	Windsock
Musselshell W.C.	3700	46 21.43	115 44.56	Type II
North Fork District (D-3):				
Orofino Airstrip S68	1005	46 29.48	116 16.61	Windsock
Clearwater Valley Hosp.	1025	46 29.5	116.15.3	Concrete Pad
Cayuse Airstrip S74	3700	46 40.0	115 04.3	
Canyon W.C.	1747	46 50.20	115 35.21	Windsock, JET A
Kelly Creek W.C.	2737	46 43.13	115 15.65	Windsock,Type II,IGE
Isabella Landing	2000	46 53.49	115 35.47	Type I
Powell District (D-6):				
Powell R.S.	3400	46 30.53	114 42.53	2 pads, JET A
Plum Creek Pit	3500	46 30.89	114 41.42	4 pads, Private
Fish Lake Airstrip S92	5646	46 19.81	115 03.79	Windsock
Elk Summit G.S.	5756	46 19.8	114 39.0	Type II, IGE
Post Office Gravel Pit	2900	46 28.03	114 59.08	OGE, Type III

GRANGEVILLE, IDAHO

Astronomical Applications Dept.

Š Add one hour for daylight time, if and when in

Medical Facilities

				Medical	Facili	ties		
Remarks	No Pad - Land at Idaho County Airport (KGIC) - Coordinates are for KGIC.	Pad for Type 3 Helicopter	Type 2 - Power lines on North and East side of pad. Dispatch - Call nurse's station direct @ 208-962-2310	Roof Top - Type 2 - 9,000 lb Dispatch - Call Lead ER nurse direct @ 208-799-6626. Try 208-799-5799 if can't reach nurse direct. State Comm 800-632-	Roof Top - Type 2 - 12,000lb - Dis- patch call ER direct at 208-883- 6246	Roof Top - Type 2 - 10,000 lb Dis- patch call ER direct @ 509-474- 3345 or 474-3342	Land on Big Green Shamrock - Room for 3 light helicopters - Dis- patch call ER direct @ 406-329- 5635	NO PAD - Land @ McCall Airport (KMYL) - Land on North Apron near compass rose. Dispatch call 208-634- 2221 to advise hospital and initiate
Frequen-	155.340	155.340	155.340	Primary 155.340 Secondary 155.280	155.340	155.340	155.280	155.340
Elevation	3309,	1104'	3554	.888	2560'	2034'	3207'	5025'
Longitude	W 116° 07.097'	W 116° 15.576'	W 116° 21.149'	W 117° 01.449'	W 117° 00.056'	W 117° 24.778'	W 113° 59.969'	W 116° 06.017'
Latitude	N 45° 56.459'	N 46° 29.191'	N 46° 03.048'	N 46° 25.016'	N 46° 43.683'	N 47° 38.947'	N 46° 52.524'	N 44° 53.841'
Location	Grangeville, ID 208-983-1700	Orofino, ID 208-476-4555	Cottonwood, ID 208-962- 3251	Lewiston, ID 208-743-2511	Moscow, ID 208-882-4511	Spokane, WA 509-455-3131	Missoula, MT 406-543-7271	McCall, ID 208-634-2221
Medical Facility	Syringa General Hos- pital (Idaho County Airport)	Clearwater Valley Hospital	St. Mary's Hospital	St. Joseph's Regional Medical - Level II Trauma Center	Gritman Medical Cen- ter	Sacred Heart Medical Center - Level II Trau- ma Center	St. Patrick's Medical Center - Level II Trau- ma Center	McCall Memorial Hospital (McCall Air- port)

20	2018 Northern R	Northern Rockies EMS Aircraft	S Aircraft	
Billings, MT	EC135 & King Air 200	Metro Aviation (St. Vincent)	(800) 538-4357	Help Flight
Billings, MT	(2) King Air 200's	Billings Clinic MedFlight	406-255-8411 406-657-4340	Med Flight
Belgrade, MT	AS 125	Reach	(800) 338-4045	Reach-24
Belgrade, MT (*Bozeman)	Agusta AW119Kx	Life Flight Network	(800)-232-0911	Life Flight
l	Agusta AW119KX, PC-12	Life Flight Network	(800)-232-0911	Life Flight
Great Falls, MT	EC135 P2+ & Cessna Mustang	Metro Aviation Aero Air Holman Aviation	(800) 972-4000	Mercy Flight
Glasgow, Malta, Poplar, Wolf Point, MT	Fixed Wing Pilatus PC-12 & C-421	Northeast MT STAT Air Ambulance Coop.	(800) 992-7828	Air Ambulance
Helena, MT	Pilatus PC12, AS350 B3	Reach	(800) 338-4045	Reach -25
Helena, MT	Learjet, King Air C90, C-421, C-340	MT Medical Transport	406-4587-8205	MT Medical Transport
Kalispell, MT	Bell 407, Pilatus PC-12	Alert	(406) 752-9797	Alert
Missoula, MT	Agusta A119	Life Flight Network	(800) 232-0911	Life Flight
Sidney, MT	Pilatus PC-12	Valley Med Flight, Inc.	800-828-0168	Valley Med Flight, Inc.
West Yellowstone, MT (Year round, parked a	(Year round, parked at Ennis, MT winter-nights/bad wx) AS 350	Air Methods	(800) 247-4324	Air Idaho Rescue 3
Boise, ID	Agusta Kuala119 & PC-12	Life Flight Network	(800) 232-0911	Life Flight
Burley, ID	Agusta A119	Life Flight Network	(800) 232-0911	Life Flight
Driggs, ID	AS 350	Air Methods	(800) 247-4324	Air Idaho Rescue
Idaho Falls, ID	Pilatus PC-12	Air Methods	(800) 247-4324	Air Idaho Rescue
Lewiston, ID	Agusta A119	Life Flight Network	(800) 232-0911	Life Flight
Pocatello, ID->Soda Springs ID 4/1	AS 350 (Bell 407 as back-up)	Air Methods	(800) 247-4324	Air Idaho Rescue
Rexburg, ID	Agusta A119	Life Flight Network	(800) 232-0911	Life Flight
Sandpoint, ID	Agusta A119	Life Flight Network	(800) 232-0911	Life Flight
Pullman, WA (Palouse Base)	Agusta A119	Life Flight Network	(800) 232-0911	Life Flight
Spokane, WA	(2) EC135 & (1) Pilatus PC 12	Life Flight Network	(800) 232-0911	Life Flight
Bismarck, ND	King Air 200, King Air C90, C-441	Bismarck Air Medical	(800) 441-1310 (701) 255-0812	Care Flight
Bismarck, ND	EC-145	Sanford Air Med	(800) 437-6886	Air Med
Minot, ND	Bell 407 (+3 fixed wing)	CriticAir	(800) 223-1596	Northstar CriticAir
Williston, ND	AS 350 B3e	Valley Med Flight, Inc.	800-828-0168	Valley Med Flight, Inc.
Gillette, WY	King Air C90B	Guardian Flight	(855) 291-8989	Guardian Flight
Cody, WY	Eurocopter AS350 B3	Guardian Flight	(855) 291-8989	Guardian Flight
Dispatch procedures for ordering MAST services: See Ch. 50 of this guide	AAST services: See Ch. 50 of this		sistance to Safety & Tra	Military Assistance to Safety & Traffic (MAST) Helicopters
 Use the military only when private contracts satisfies be provided to periorin the mission. Determine radio frequencies to be utilized and flight following procedures. Most military helicopters are restricted to VHE_AM communications. 	es cannot be provided to periorin the mission. Int following procedures. Most military helicopters a		ters can be ordered for emerg ters can be dispatched with a	mach melicopters can be ordered for emergency extraction using a nots, system. These helicopters can be dispatched with a flight surgeon if requested or may be
 An aerial platform may be a necessary link for flight following communications 	ht following communications.	used in conju	used in conjunction with Enrich nelicopiters.	
Spokane, WA Fairchild AFB	UH-1N Iroquois (IR & Night Capabilities)	36th	on 509-247-2421 (ops)	Hoist, Winch, 240' cable
Great Falls, MT Malmstrom AFB	UH1N (Bell-212) 40th Helicop	40th Helicopter Squadron 406-731-325	406-731-3250 or 3257 (0730-1700) 406-731-3801 Command Post	Hoist, Winch, 250' cable
When transporting injured personnel by helicopter under	ter under Agency Contract, the pilot or manager will establish direct communications with the hospital staff.	ager will establish direct communic	ations with the hospital staff.	In Montana that frequency

when transporting injured personnel by helicopter under A is "White" 155.280 and in Idaho that frequency is 155.340.

Local Lodging Facilities

GRANGEVILLE		(200) 000 000
Gateway Motel	700 W. Main, Grangeville	(208) 983-2500
Elkhorn Lodge	South 1st and E, Grangeville	(208) 983-1500
Downtowner Inn	113 E. North, Grangeville	(208) 983-1110
Super 8 Motel	801 W.S. 1st St. Grangeville	(208) 983-1002
WHITEBIRD		
Hoots Motel	Highway 95 South, Whitebird	(208) 839-2265
Whitebird Motel	Whitebird	(208) 839-2308
RIGGINS		
Riverview Motel	704 Main, Riggins	(208) 628-3041
Salmon River	1203 S. Hwy 95, Riggins	(888) 628-3025
Bruce Motel	515 Main, Riggins	(208) 628-3005
Best Western Salmon Rapids	US Hwy 95	(208) 628-2743
Riggins Motel	615 S. Main	(800) 669-6739
LUCILE		
Steelhead Inn	Milepost 210 Hwy 95, Lucile	(208) 628-3044
COTTONWOOD		
The Country Haus	407 Foster, Cottonwood	(208) 962-3391
DIXIE		
Silver Spur Lodge	Main St. Dixie	(208) 842-2417
POWELL		
Lochsa Lodge	Powell	(208) 942-3405
PIERCE		
Pierce Motel	509 S. Main, Pierce	(208) 464-2324
The Timber Inn	2 S. Main, Pierce	(208) 464-2736
Clearwater Hotel & Café	110 S. Main, Pierce	(208) 464-2721
LOWELL	•	, ,
Lowell Motel & Gas	Lowell	(208) 9268822
Three Rivers Resort	Lowell	(208) 926-4430
Ryan's Wilderness Inn & Cafe	Highway 12, Lowell	(208) 926-4706
KAMIAH		
Clearwater 12 Motel	Highway 12, Kamiah	(208) 935-2671
Sundown	1004 3 rd St. Hwy 12, Kamiah	(208) 935-2568
Lewis & Clark Resort	Hwy 12, S of Kamiah	(208) 935-2556
	11y 12, 2 01 11	(200) 755 2550

LOCAL EATING FACILITIES

GRANGEVILLE		
The Depot	Highway 95 North, Grangeville	(208) 983-0176
Hilltop	500 E. Main	(208) 983-1714
Hong Fa	521 W. Main, Grangeville	(208) 983-1701
Palenque Mexican Restaurant	711 W. Main, Grangeville	(208) 983-1335
Pizza Factory	126 W. Main, Grangeville	(208) 983-5555
Oscar's Restaurant	101 E. Main, Grangeville	(208) 983-2106
Subway	179 Greenacres Lane	(208) 983-3054
Taco Johns Season's	Main and Highway 95, Grangeville 124 West Main	(208) 983-7508 (208) 983-4203
WHITEBIRD Hoots Café	Hwy 95, Whitebird	(208) 839-2265
Silver Dollar Mac's Bar & Grill	Main St., Whitebird Main St., Whitebird	(208) 839-2293 (208) 839-2277
RIGGINS		
Back Eddy Grill	533 N. Main, Riggins	(208) 628-9233
Summersville Café	106 S. Main, Riggins	(208) 628-3211
Cattlemens	601 S. Main, Riggins	(208) 628-3195
Seven Devils Steakhouse	312 N. Main, Riggins	(208) 628-3351
PIERCE Cedar Inn Restaurant & Lounge	412 S/ Main, Pierce	(208) 464-2704
KAMIAH Palenque Mexican Rextaurant	501 4 th St. , Kamiah	(208) 935-7700
Sacajawea Café	Lewis-Clark RV Park, Kamiah	(208) 935-1958
The Hub	406 Main, Kamiah	(208) 935-1670
Hearthstone	502 Main, Kamiah	(208) 935-1912
Pizza Factory	814 Highway 12, Kamiah	(208) 935-2134
COTTONWOOD The Hang Out The County Haus	1 West Main, Cottonwood 407 Foster Ave, Cottonwood	(208)-962-7383 (208) 962-3391

FIRE DANGER -- Uplands > 3000ft Maximum, Average, and 90th Percentile, based on 20 years data 60_ Release Component 50 40 30 Energy 10 Jun Jul Aug Sep Oct

Fire Danger Area:

- ID-NCF > 3000ft
- Fire Wx ID Zone's 102/103
- Uplands SIG
 - Meets NWCG Wx Station Standards

Fire Danger Interpretation:



EXTREME - Use extreme caution

(Caution) -- Watch for change

Moderate - Lower Potential, but always be aware

Maximum - Highest Energy Release Component by day for 1994 - 2013

Average - shows peak fire season over 20 years (2735 observations) 90th Percentile - Only 10% of the 2735 days from 1994 - 2013 had an Energy Release Component above 54

Local Thresholds - Watch out: Combinations

of any of these factors can greatly increase fire behavior: 20' Wind Speed over 20 mph, RH less than 20%, Temperature over 80, 1000-Hour Fuel Moisture less than 10

Years to Remember: 2007 2012 Extreme MCGUIRE RATTLESNAKE 60 Release Component 50 40 30_ nergy 20 Jun Jul Aua Sep Oct Fuel Model: G - Short-Needle (Heavy Dead)

Remember what Fire Danger tells you:

√ Energy Release Component gives seasonal trends

calculated from 2 pm temperature, humidity, daily temperature & rh ranges, and precip duration.

Wind is NOT part of ERC calculation.

Watch local conditions and variations across

the landscape - Fuel, Weather, Topography Listen to weather forecasts -- especially WIND.

Past Experience:

Problem fires in this area are often in FM 10 with heavy fuel loading and high potential for torching, spotting and crowning. Beware of the profuse spotting potential of sub-alpine fir. Fire will spread down hill faster than anticipated at night when thermal belts are present. Beetle killed stands will exhibit extreme fire behavior beyond anything you may have ever experienced. Both the 2007 Rattlesnake (102,000 ac) and 2012 McQuire Fires (43,577 ac) exhibited rapid fire spread over 5,000 acres in one burn period. Both fires had extreme fire behavior (FL > 20 ft) with sustained crown fire runs during drought conditions

Uplands SIG RAWS are: Moose Creek (101028), Powell (101031), Red River (101045)

Responsible Agency: USFS-NCF

Fire Danger Area:

ID-NCF < 3000 ft Fire WX ID Zone's 102/103

FF+4.1 build 1622 05/13/2014-14:35 (C:\Workspace\FireFamilyPlus\Nez Clear)

Design by NWCG Fire Danger Working Team

FIRE DANGER -- River Breaks < 3000ft Maximum, Average, and 90th Percentile, based on 20 years data 90 80 70 60 Burning Index 50 40 30 Jul Aug Sep Oct Jun

Slate Creek RAWS 101037 * Meets NWCG Wx Station Standards

Fire Danger Interpretation:

EXTREME -- Use extreme caution

- Watch for change

Moderate - Lower Potential, but always be aware

Maximum - Highest Burning Index by day for 1994 - 2013

Average - shows peak fire season over 20 years (2091 observations) 90th Percentile -- Only 10% of the 2691 days from 1994 - 2013 had an Burning Index above 68

Local Thresholds - Watch out: Combinations

of any of these factors can greatly increase fire behavior: 20' Wind Speed over 15 mph, RH less than 20%, Temperature over 80. Burning Index over 40

Years to Remember: 2012 2007 80 70 Poe Cabin 60 Burning Index 50 40 30 Sep Jun Oct Aug Fuel Model: C - Pine-Grass Savanna

Remember what Fire Danger tells you:

Burning Index gives day-to-day fluctuations calculated from 2 pm temperature, humidity, wind,

daily temperature & rh ranges, and precip duration. Wind is part of BI calculation.

Watch local conditions and variations across the landscape -- Fuel, Weather, Topography.

√ Listen to weather forecasts -- especially WIND.

Past Experience:

FM2 dominates the River Breaks below 3000ft. Flash fuels, steep slopes and rolling material aid rapid fire growth that will surprise you. Bl of 40 equates to a 4' flame length and handtools may become ineffective. Steep slopes can make ecscape routes difficult. Consider indirect attack to nearest "best" ridge to increase safety margin and success probability. Both the 2012 Sheep (48,626 ac) and 2007 Poe Cabin (58,520 ac) Fires exhibited rapid upslope fire spread (ROS > 350 ch/hr) with FL > 12' on slopes 50% to

Responsible Agency: USFS-NCF FF+4.1 build 1622 05/13/2014-14:36 (C:\Workspace\FireFamilyPlus\Nez Clear)

Design by NWCG Fire Danger Working Team

Notes: